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PHOTOGRAPHIC INTERPRETATION REPORT

NPIC/R-366/64
June 1964

AIR DEFENSE (PVO) ELECTRONIC FACILITIES AT SELECTED LOCATIONS, USSR

CIA DIA

25X1

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

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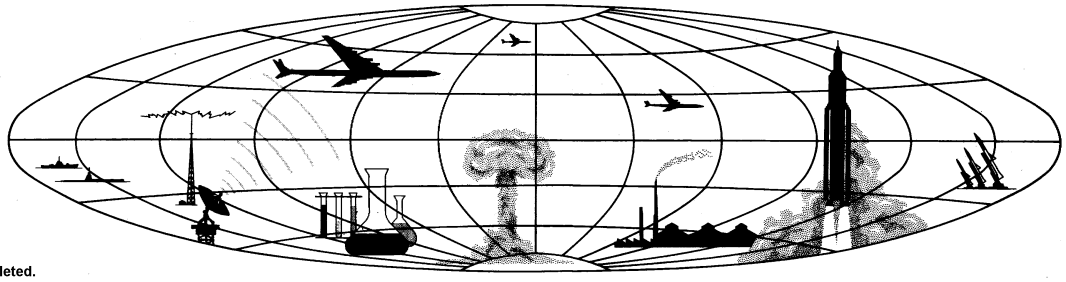

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AIR DEFENSE (PVO) ELECTRONIC FACILITIES AT SELECTED LOCATIONS, USSR

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INTRODUCTION

25X1 This report answers two [redacted] requirements which overlap in both subject matter and location. The first requested additional information on microwave sites in the Olenegorsk (Olenya) area; the second requested a search for air defense (PVO) associated electronic sites at 14 suspect areas and at such other locations as might 25X1 be noted on [redacted] photography.

Both searches produced substantial intelligence information. With respect to microwave in the Olenegorsk area, four confirmed microwave antennas were found which constitute a chain extending in a roughly north-south direction. In regard to air defense, only two of the listed areas -- Olenegorsk and Nikolayevsk-Na-Amure -- were covered by photography suitable for interpretation. In these two areas, however, as well as in a number of others examined pursuant to this search (Figure 1), many items of specific intelligence interest were noted.

Among those items is that antennas possibly associated with SWAMP and MARKHAM (PVO data systems) have been identified. Another is that TALL KING antennas may be deployed in pairs. (A good example of this occurs at Sortavala, one of the Leningrad outer radar sites, and has been reported in detail together with the nine other Leningrad circumferential radar sites. 1/) In several instances where the second TALL KING could not be observed, an alternate location and full support was provided for it, as typified by sites near Dikson and Zhigansk. A third significant item is that the number of components associated with a PVO headquarters can be quite large, reaching a magnitude apparently not previously realized. Olenegorsk, perhaps the most striking example of this, has at least seven separate electronic sites (Figures 2-8), and for this reason is presented in substantial detail. Neither available time nor photographic quality permits other areas to be treated in as detailed a manner. However, a photograph and brief description are provided for each, and a summary tabulation of components has been prepared to facilitate comparison (Table 1).

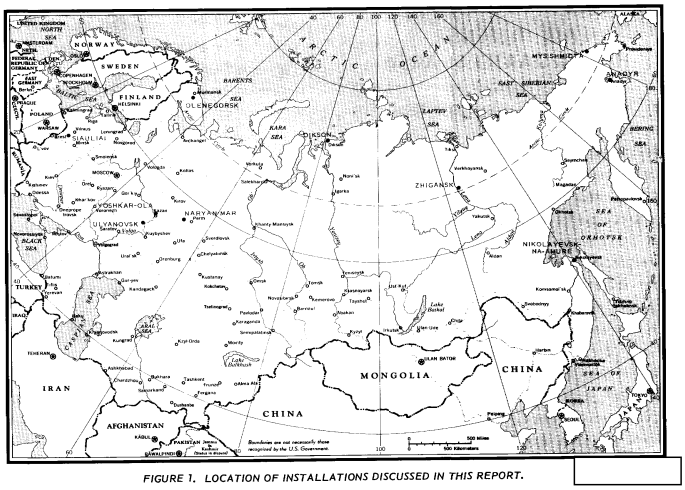

FIGURE 1. LOCATION OF INSTALLATIONS DISCUSSED IN THIS REPORT. [redacted] 25X1

Table 1. Summary of Facilities at Installations Described in This Report

OLENEGORSK Air Defense Headquarters Area	NARYAN-MAR Air Defense Air Warning Sites*	DIKSON Air Defense Air Warning Sites*	MYS SHMIDTA Air Defense Air Warning Sites*	ANADYR Air Defense Headquarters Area	NIKOLAYEVSK-NA-AMURE Air Defense Air Warning Sites	ZHIGANSK Air Defense Air Warning Site	YOSHKAR-OLA Air Defense Headquarters Area	ULYANOVSK Air Traffic Control	SIAULIAI Air Defense Air Warning Site**
Headquarters Center (BAR LOCK, SPOON REST, STONE CAKE, TOKEN, ROCK CAKE)	Radar Site 1 (TALL KING)	TALL KING Radar Site and Alternate	Radar Site 1 (TALL KING)	Radar Site 1 (BAR LOCK)	Radar Site (BAR LOCK, others U/I)	TALL KING Radar Site and Alternate	Radar Site (BAR LOCK, STONE CAKE, others U/I	Radar Site (TOKEN-type)	Radar Site (BAR LOCK, STONE CAKE)
Ground-Air-Ground Commo Site (probable MARKHAM)	Radar Site 2 (BAR LOCK, SPOON REST, KNIFE REST A and B, poss FISH NET, STONE CAKE)	Radar Site 2 (BAR LOCK, SPOON REST, STONE CAKE)	Radar Site 2 (BIG MESH, FLAT FACE, SPOON REST, one U/I)	Radar Site 2 (BIG MESH, SPOON REST, KNIFE REST A and B, 2 FISH NET)	HF Commo Site	Support area	Operations Area		Operations Area
Microwave and HF Commo Site (possible SWAMP)	Air Defense Control Center and HF Antenna Field	HF Commo Site 1	Radar Site 3 (BAR LOCK, STONE CAKE, others U/I)	HF Commo Site 1	Reported Air Defense Sector Headquarters		Communications Site (similar to Olenegorsk ground-ground site)		
Regional HF Commo Transmitting Center	HF Commo Site 1	HF Commo Site 2	HF Commo Site 1	HF Commo Site 2			Possible Communications Site (similar to Olenegorsk ground-air-ground site)		
Regional HF Commo Receiving Center	HF Commo Site 2	Possible SMALL CROSS Navigational Antenna	HF Commo Site 2						
Microwave Antenna 3	HF Commo Site 3 and airfield operations area	HF Commo Site 3							
Microwave Antenna 4		HF Commo Site 4							

*Would have been classified as a headquarters area except that no fighter-interceptor aircraft were observed at nearby airfield.
**Would have been classified as a headquarters area except that no communications facilities were observed in immediate vicinity.

OLENEGORSK

AIR DEFENSE HEADQUARTERS AREA

Electronic Facilities Associated With an Air Defense Headquarters Area. The scope of the facility and the number of personnel involved are the predominant considerations in classifying an installation as an air defense headquarters area. In some instances, the presence or absence of fighter-interceptor aircraft in the immediate vicinity is an additional factor. In the case of Olenegorsk, seven separate electronic facilities were observed at, or in the near environs of, Olenegorsk Airfield [redacted] an air defense headquarters center (Figure 3), an air defense ground-air-ground communications site (Figure 4), an air defense microwave (antenna 2) and high frequency (HF) communications site (Figure 5), a regional HF communications transmitting center (Figure 6), a regional HF communications receiving center (Figure 7), and microwave antennas 3 and 4 (Figure 8). Microwave antenna 4 is positioned where it could jointly serve the three launch areas of the Taybola IRBM Complex (BE No [redacted] and, therefore, is not necessarily associated with air defense.

In many respects, the facilities at Olenegorsk resemble the air defense sites previously reported at Krasnovodsk Airfield, 2/ an area which has been subsequently identified as SWAMP associated. 3/ On the basis of these similarities, two antenna sites at Olenegorsk are suggested as SWAMP and MARKHAM signatures.

Microwave Facilities. Four microwave antennas were detected in the Olenegorsk area (Figures 3, 5, and 8). It is not possible to determine the orientation, configuration, frequency, or type of these antennas because of small scale and obliquity. However, the antennas are larger than dish parabolics and are possibly two horns or a single large mattress-yagi type. Also, if the sites are assumed to be interconnected, then their orientation would appear self-evident. The first antenna, a terminal facility, is situated at the air defense headquarters center; the others, which are relay antennas, form a dogleg pattern bending northeast via the Olenegorsk SAM Support Facility (BE No [redacted] and then extending northward to the Taybola IRBM Complex.

Air Defense Headquarters Center

Location: one nm east of center of Olenegorsk Airfield [redacted]

Remarks: Antennas in the operations area of the center (Figures 3 and 8) consist of SPOON REST, BAR LOCK, STONE CAKE, TOKEN, and ROCK CAKE, all on mounds, and a terminal microwave antenna (designated microwave antenna 1). The van-mounted radar antennas are supported from small shed-type buildings rather than from electronic vans. The support area for the entire center includes 2 barracks for enlisted personnel, 10 individual units for officer housing, a very large sector headquarters operations building, a radar maintenance building, 6 large general-purpose utility buildings, and a diesel-electric generating station with a fuel-oil dump.

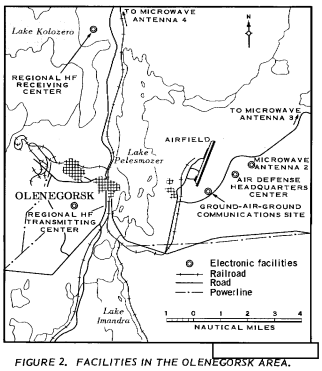

FIGURE 2. FACILITIES IN THE OLENEGORSK AREA.

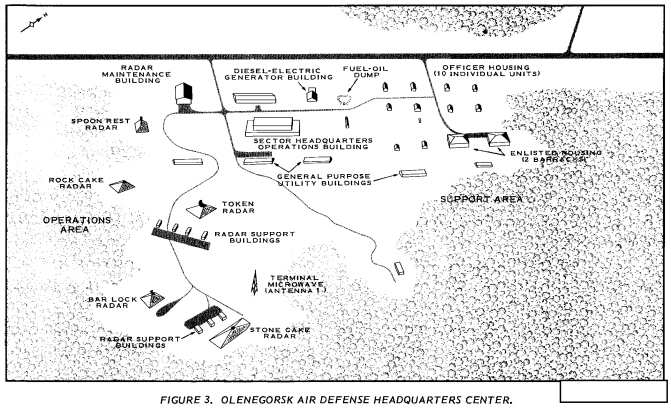

FIGURE 3. OLENEGORSK AIR DEFENSE HEADQUARTERS CENTER.

Air Defense Ground-Air-Ground Communications Site

Location: one nm SW of headquarters center

Coordinates: 68-08-15N 33-28-00E [redacted]

Remarks: The site (Figures 4 and 8) includes a control building and at least seven pole masts, probably mixed HF and very high frequency (VHF) types, which are fence secured and concealed in woods. The antennas do not appear to be arranged in any particular pattern, such as a rhombic or V-antenna, suggesting that each mast is an individual antenna for ground-air-ground communications for aircraft control. Similarities between this facility and the ground-air-ground communications link at Krasnovodsk*, the airfield at each location being SWAMP associated, make this site a strong suspect for a MARKHAM signature.

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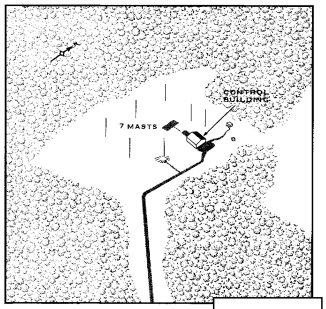

FIGURE 4. OLENEGORSK GROUND-AIR-GROUND COMMUNICATIONS SITE.

Air Defense Microwave and HF Communications Site

Location: 0.8 nm NE of the headquarters

Coordinates: 68-09-45N 33-32-50E

25X1 [redacted]

Remarks: This facility, concealed in woods, contains a microwave antenna (designated as antenna 2) atop a tower several hundred feet high, three pole masts (probably HF), and a single low lattice tower of unidentified purpose (Figures 5 and 8). The proximity of this site to the headquarters center and the fact that it is in the chain of four microwave antennas noted in this report indicate that it is a ground-ground relay link. In view of this, it is believed that this site may constitute a SWAMP signature.

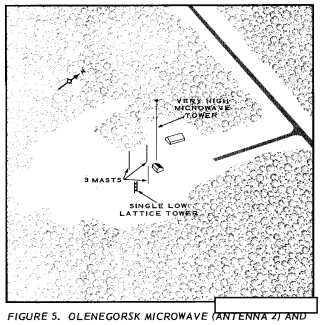

FIGURE 5. OLENEGORSK MICROWAVE (ANTENNA 2) AND HF COMMUNICATIONS SITE.

Regional HF Communications Transmitting Center

Location: 1.5 nm south of the center of Olenegorsk

Coordinates: 68-07-30N 33-15-00E

25X1 [redacted]

Remarks: The antenna field (Figures 6 and 8) is composed of 14 rhombic transmitting antennas arranged in pairs of day-night types. There is also a local radio broadcast vertical radiator, several hundred feet tall, which has a separate transmitter building. The support area is self-sustaining, containing more than 25 mixed-type buildings. Principal structures are 2 barracks buildings, a large administration building, a diesel-electric power plant, a water storage tower, and many shops, sheds, and utility buildings.

This facility is classified as a center because of the number and type of antennas, the size of the support area, and the fact that the antennas are oriented toward numerous correspondents. Exact orientation of the antennas in terms of their correspondents has not yet been determined because of technical mensuration difficulties caused by the obliquity of the photography. However, an initial plot shows that Moscow, Leningrad, and Murmansk are all likely correspondents.

Regional HF Communications Receiving Center

Location: 6 nm north of the center of Olenegorsk

Coordinates: 68-14-00N 33-16-00E

[redacted]

Remarks: This center (Figures 7 and 8) includes 13 identifiable fishbone antennas (more may exist) of the 5-3-3-5 configuration. This is the same type of antenna previously reported as being utilized in command links between Cuba and Moscow, 4/ and more recently at certain Soviet MRBM, IRBM, and ICBM launch areas. From Olenegorsk, it is only 13 nm north-northeast to the Taybola IRBM Complex and, therefore, in this case the rhombic and fishbone antennas could serve both the IRBM launch complex and air defense command link requirements.

Microwave Antenna 3

Location: 8.5 nm NE of Olenegorsk Airfield; one nm south of Olenegorsk SAM

[redacted] 25X1

Coordinates: 68-11-45N 33-49-00E

25X1 [redacted]

Remarks: The facility (Figure 8) consists of a single building, and a micro-

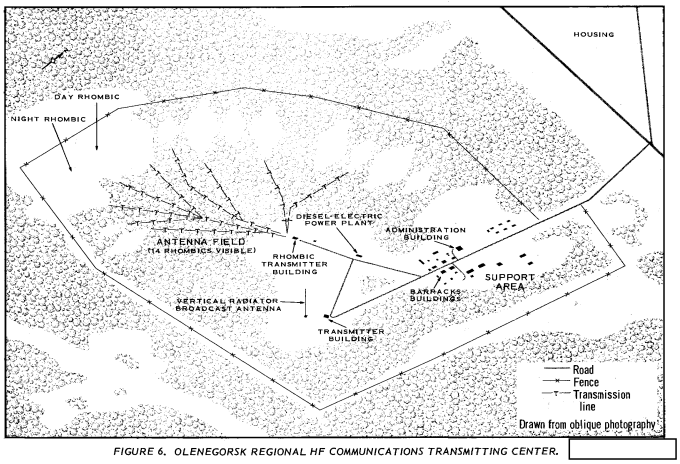

FIGURE 6. OLENEGORSK REGIONAL HF COMMUNICATIONS TRANSMITTING CENTER. [redacted] 25X1

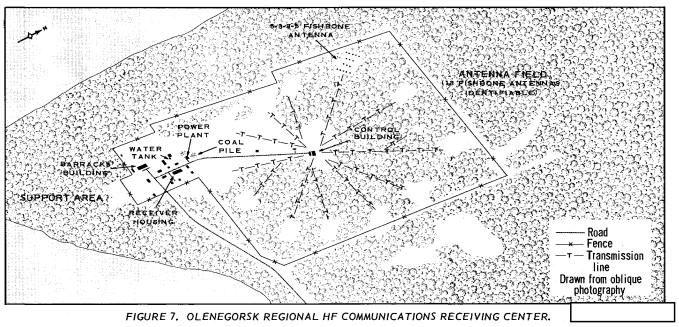

FIGURE 7. OLENEGORSK REGIONAL HF COMMUNICATIONS RECEIVING CENTER. [redacted] 25X1

25X1 [redacted]

wave antenna which is atop a tower about 300 feet high. Further details on the antenna cannot be determined, as explained earlier.

Microwave Antenna 4

Location: 18 nm north of Olenegorsk Airfield; centered approximately equidistant from the three launch sites of the Taybola IRBM Complex

Coordinates: 68-27-00N 33-23-00E [redacted]

Remarks: The microwave antenna and support building (Figure 8) appear identical to those at microwave antenna 3, but further details are not possible. This tower is referenced in [redacted] and reported in NPIC/R-201/64. 5/ 25X1 25X1 25X1

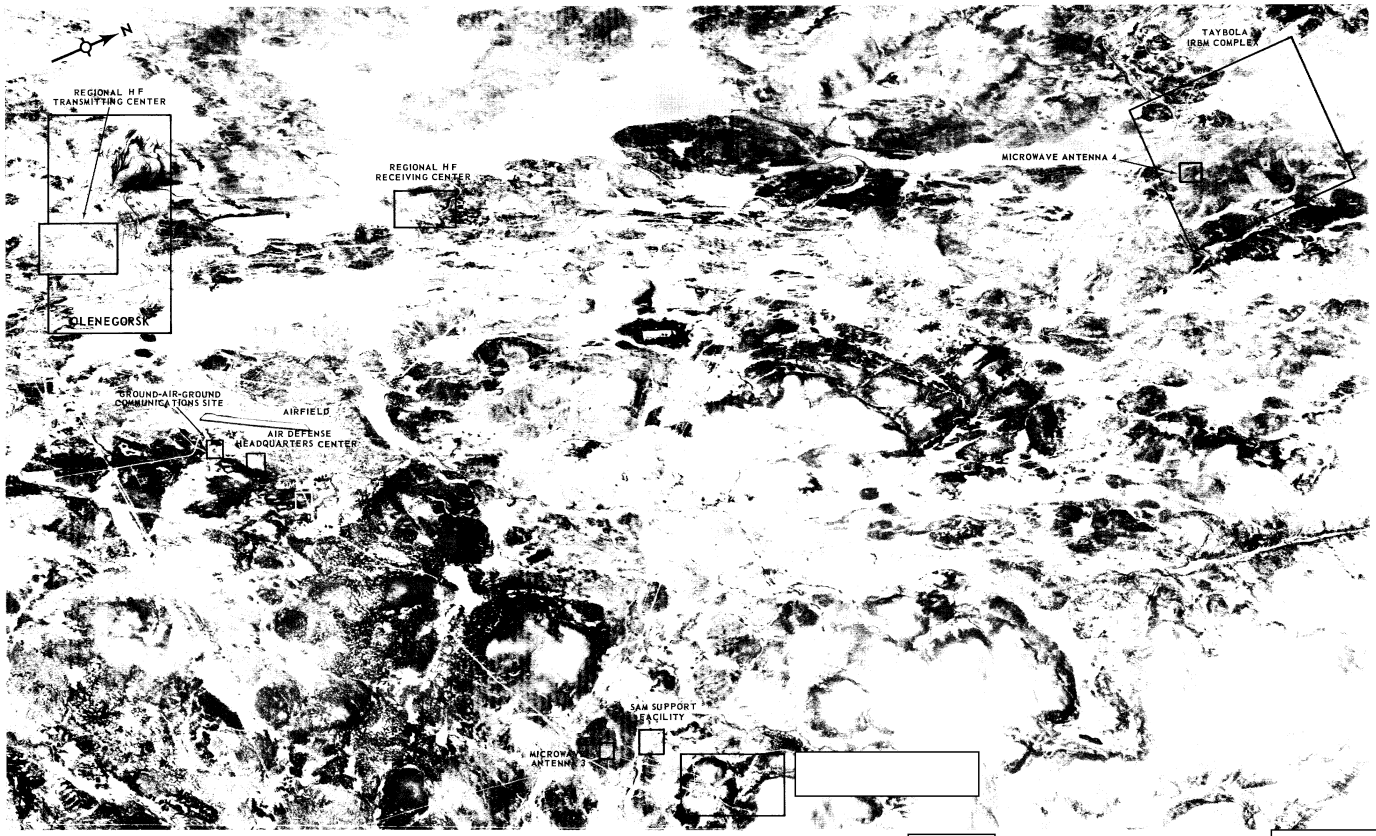

FIGURE 8. OLENEGORSK AIR DEFENSE HEADQUARTERS AREA AND ASSOCIATED FACILITIES, [redacted] 25X1 25X1

NARYAN-MAR
AIR DEFENSE AIR WARNING SITES

Air defense electronic facilities in the Naryan-Mar area (Figure 9) consist of a TALL KING radar site, a radar site with BAR LOCK and other antennas, an air defense control center with an associated HF communications antenna field, and three other HF communications sites. The aircraft observed at Naryan-Mar Airfield [redacted] were not fighter-interceptor types or Naryan-Mar would be considered an air defense headquarters area.

Radar Site 1 (TALL KING)

Location: approximately 4 nm NE of Naryan-Mar Airfield

Coordinates: 67-39N 53-11E

[redacted]

Remarks: The site contains a TALL KING antenna, a diesel-electric generator with 8 revetted fuel-oil tanks, and a control-support area consisting of 6 small buildings.

Radar Site 2

Location: just NW of radar site 1

Coordinates: 67-40N 53-10E

[redacted]

Remarks: The site contains BAR LOCK, SPOON REST, KNIFE REST A and B, and possible FISH NET and STONE CAKE. There are also five small support buildings and one larger barracks building.

Control Center and HF Communications Antenna Field

Location: adjacent to radar site 2

Coordinates: 67-40N 53-08E

[redacted]

Remarks: The site includes a large administration/control building, 7 smaller barracks-type quarters buildings, a vehicle shed, a maintenance building, and 15 storage sheds. The HF communications antenna field consists of 7 pairs (14 masts) of horizontal-wire doublet antennas with associated radio shacks.

HF Communications Site 1

Location: just NW of the control center

Coordinates: 67-40N 53-08E

[redacted]

Remarks: The site consists of two pairs (four masts) of horizontal-wire doublet antennas with a centrally located control building.

HF Communications Site 2

Location: approximately 1.4 nm NNE of the airfield

Coordinates: 67-38N 53-04E

[redacted]

Remarks: The site consists of 3 pairs (6 masts) of horizontal-wire doublet antennas, a control building, and 3 small utility buildings.

HF Communications Site 3 and Airfield Operations

Location: just off NW end of airfield runway

Coordinates: 67-38N 53-02E

[redacted]

Remarks: The site is collocated with the airfield operations building and weather station. The antenna field includes 16 visible masts but the total number is not able to be determined.

FIGURE 9. NARYAN-MAR AIR DEFENSE AIR WARNING SITES [redacted]

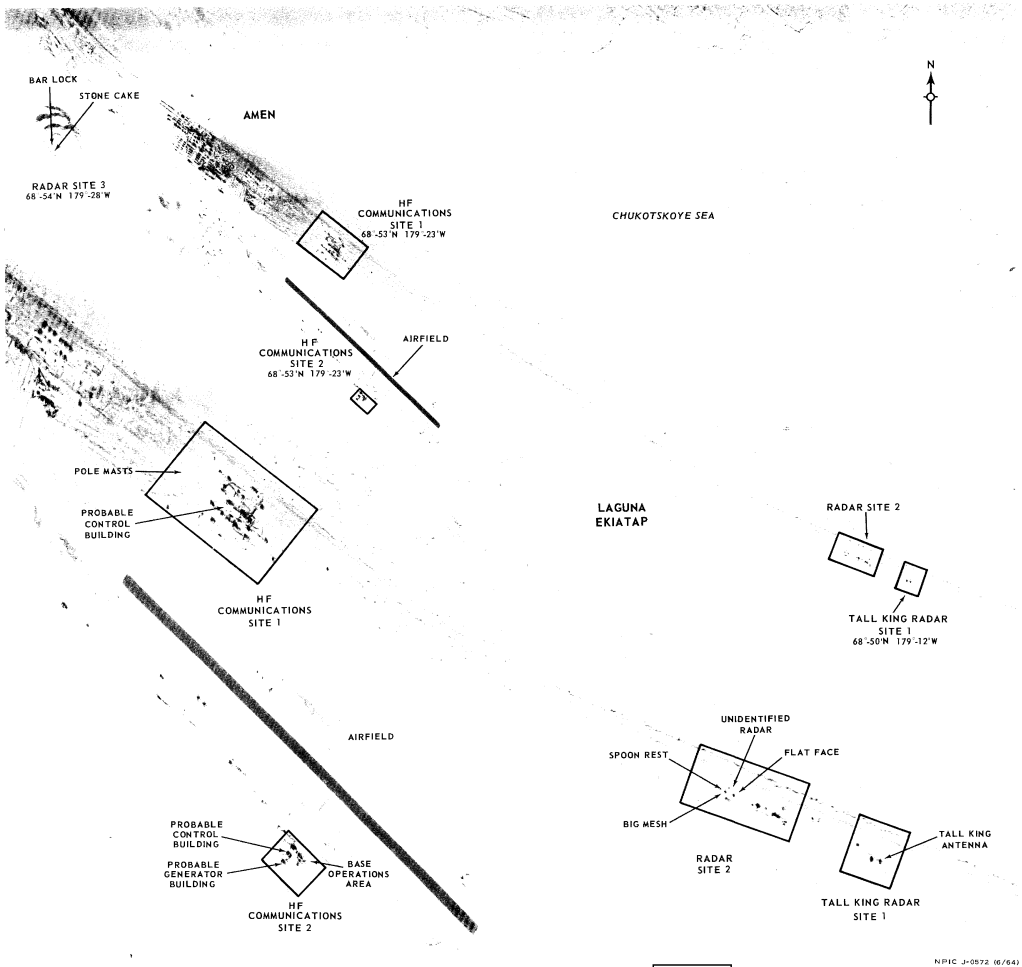

FIGURE 10. MYS SHMIDTA AREA AIR DEFENSE WARNING SITES, [redacted]

25X1

MYS SHMIDTA

AIR DEFENSE AIR WARNING SITES

This installation is composed of a TALL KING radar air warning site, 2 other radar sites, and 2 communications sites (Figure 10). No interceptor-type aircraft were observed at the airfield or this installation would have been classified as an air defense headquarters.

Radar Site 1 (TALL KING)

Location: 4.5 nm SE of Mys Shmidta Airfield [redacted] 25X1

Coordinates: 68-50-30N 179-12-00W

[redacted] 25X1

Remarks: This site contains a single TALL KING antenna, a few associated support buildings, a diesel-electric generator, and a fuel-oil storage area.

Radar Site 2

Location: immediately NW of the TALL KING site

Coordinates and photography: same as above

Remarks: The site contains a BIG MESH, a FLAT FACE, a SPOON REST, and an unidentified radar, all on mounds. In addition, there is a support building for the radar crew and several small maintenance sheds which apparently serve both radar sites.

Radar Site 3

Location: 2.5 nm NW of the airfield

Coordinates: 68-54-30N 179-28-30W

[redacted] 25X1

Remarks: A BAR LOCK and a STONE CAKE are identifiable at the site; other radar antennas are present but are not

25X1

able to be identified. In addition, the site contains a radar crew quarters building, a diesel-electric generator, and several small support buildings.

HF Communications Site 1

Location: just north of the NW end of Mys Shmidta Airfield

Coordinates: 68-53-30N 179-23-30W

25X1 [redacted]

Remarks: HF pole mast antennas, the specific number and type of which cannot be determined, are scattered through an antenna field around a transmitter/receiver control building and 4 sizable support buildings. Other buildings in the area are apparently for base operations.

HF Communications Site 2

Location: at the base operations and maintenance area just south of the runway center

Coordinates: 68-52-40N 179-23-30W

25X1 [redacted]

Remarks: A number of HF pole mast antennas, probably of the dipole and rhombic types, are spread around the base operations area, which contains a probable control building and a probable diesel-electric generator.

ULYANOVSK
AIR TRAFFIC CONTROL

Radar Site

Location: south of runway and just west of the operations area at Ulyanovsk Southwest Airfield ([redacted])

25X1

Coordinates: 54-16N 48-16E

25X1 [redacted]

Remarks: The site (Figure 11) con-

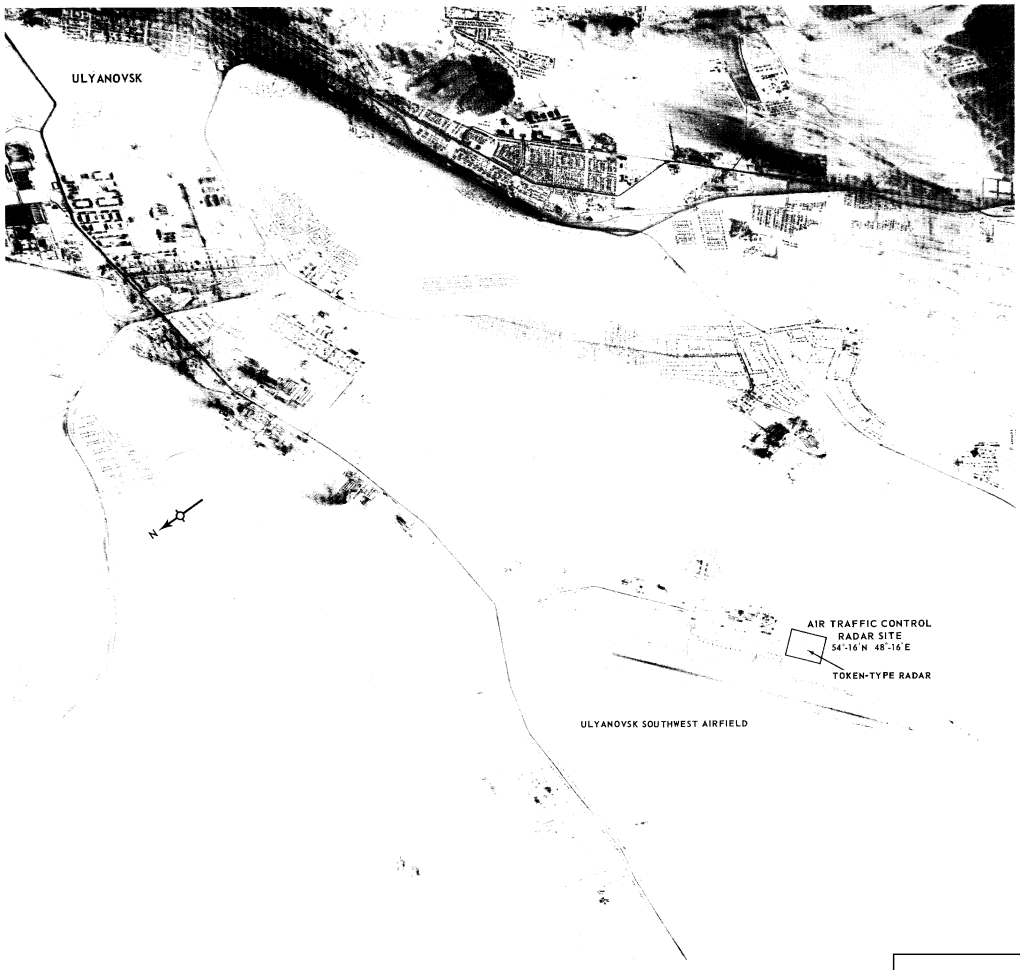

FIGURE 11. ULYANOVSK AIR TRAFFIC CONTROL RADAR SITE, [redacted]

25X1 [redacted] 25X1

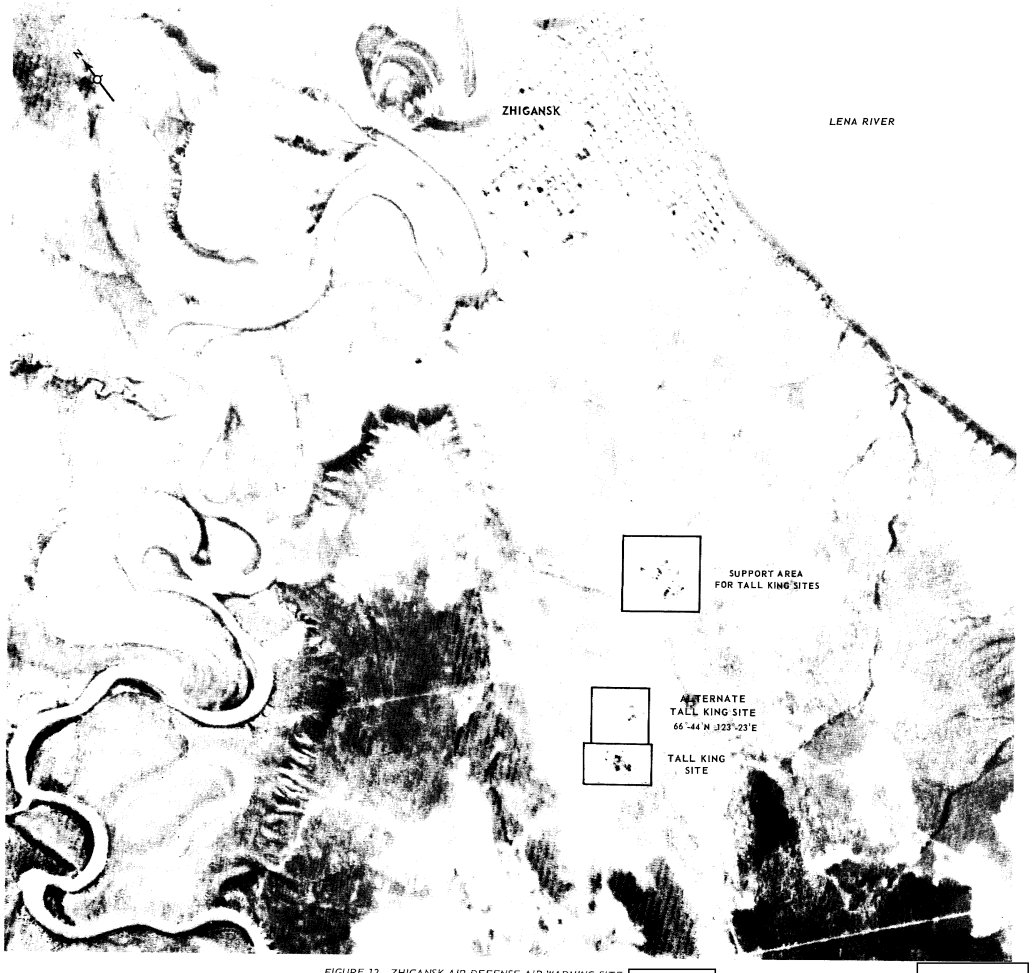

FIGURE 12. ZHIGANSK AIR DEFENSE AIR WARNING SITE,

tains one radar antenna, not specifically identifiable but of the TOKEN type, situated atop a mound. It is considered to be utilized for air traffic control because of its position and the lack of associated antennas such as height finders, etc.

ZHIGANSK

AIR DEFENSE AIR WARNING SITES

In the Zhigansk area, a TALL KING radar site is positively identified and all the components for a second, alternate site can also be identified except for the antenna (Figure 12). However, Mission [redacted] photography did not cover Zhigansk Airfield [redacted] nor did the quality of the available photography permit identification of communications antennas suitable to support the TALL KING sites.

TALL KING Radar Site and Alternate Site

Location: 2 nm south of Zhigansk
Coordinates: 66-44-15N 123-22-40E

Remarks: The TALL KING site with the visible antenna also contains a monitor-roof building, 2 slightly smaller support buildings, and a diesel-electric generator with six revetted fuel-oil storage tanks. The alternate site, just northeast of the first site, is virtually identical except that no TALL KING antenna is observed.

Support Area

A support area, common to both sites, is situated about 0.8 nm to the northeast. It contains at least nine buildings and a number of other objects, but photographic quality precludes detailed identification.

ANADYR

AIR DEFENSE HEADQUARTERS AREA

This installation is composed of two air warning radar sites and two HF communications sites (Figure 13). These facilities, together with the support areas and the presence of more than 20 interceptor aircraft at Anadyr Leninka Airfield 25X1 [redacted] appear sufficient to classify this installation as an air defense headquarters.

Radar Site 1

Location: At Anadyr Mys Nizmenny 25X1 Airfield [redacted]

Coordinates: 68-47-45N 177-34-45E 25X1 [redacted]

Remarks: The site contains BAR LOCK situated on a mound and several small radar crew quarters buildings.

Radar Site 2

Location: 0.7 nm ESE of the center of Mys Nizmenny Airfield

Coordinates: 68-47-25N 177-36-10E 25X1 [redacted]

Remarks: The site includes a BIG MESH, SPOON REST, KNIFE REST A and B, and two FISH NET. There are also radar crew quarters buildings, a bunker, and several small unidentified objects.

HF Communications Site 1

Location: 4 nm ESE of Mys Nizmenny Airfield; 3.2 nm north of Anadyr Leninka Airfield

Coordinates: 64-46-10N 177-41-30E 25X1 [redacted]

Remarks: The site consists of a large antenna field with numerous pole masts, a transmitter building, a probable diesel-

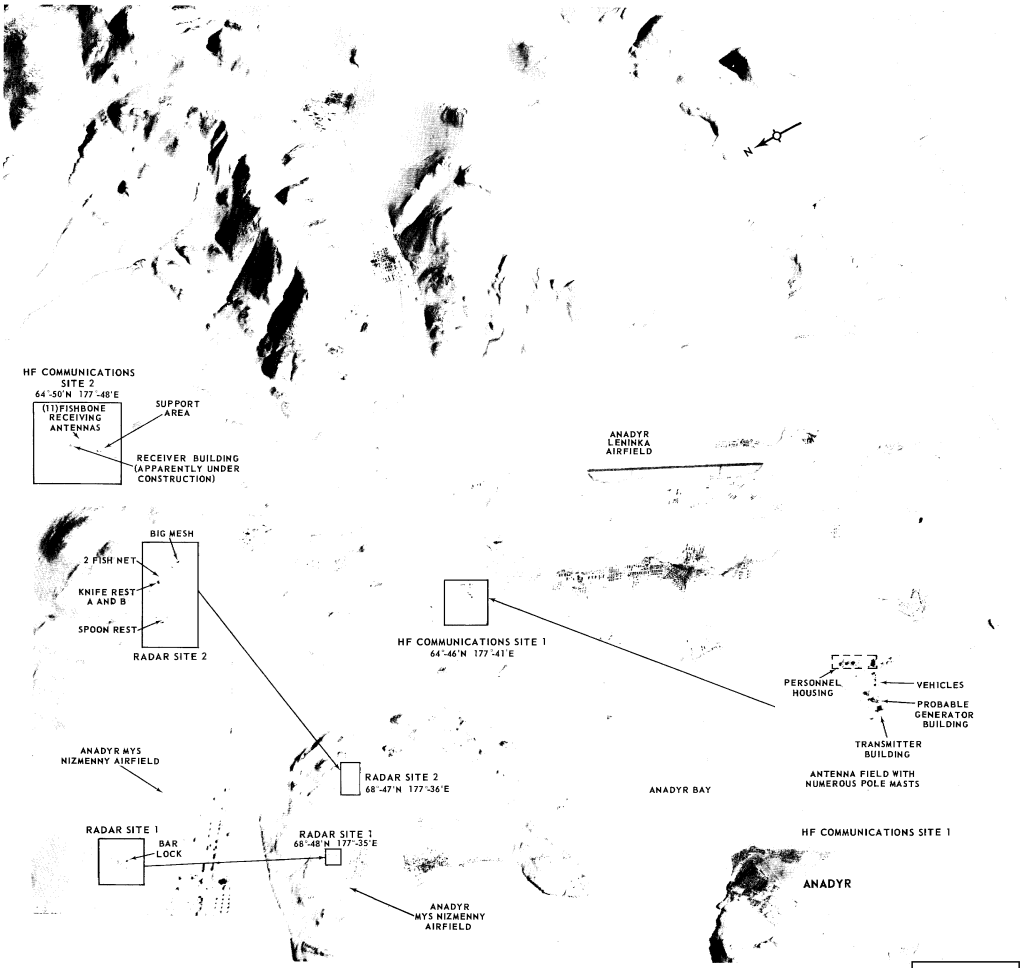

FIGURE 13. ANADYR AIR DEFENSE HEADQUARTERS AREA [redacted] 25X1 25X1

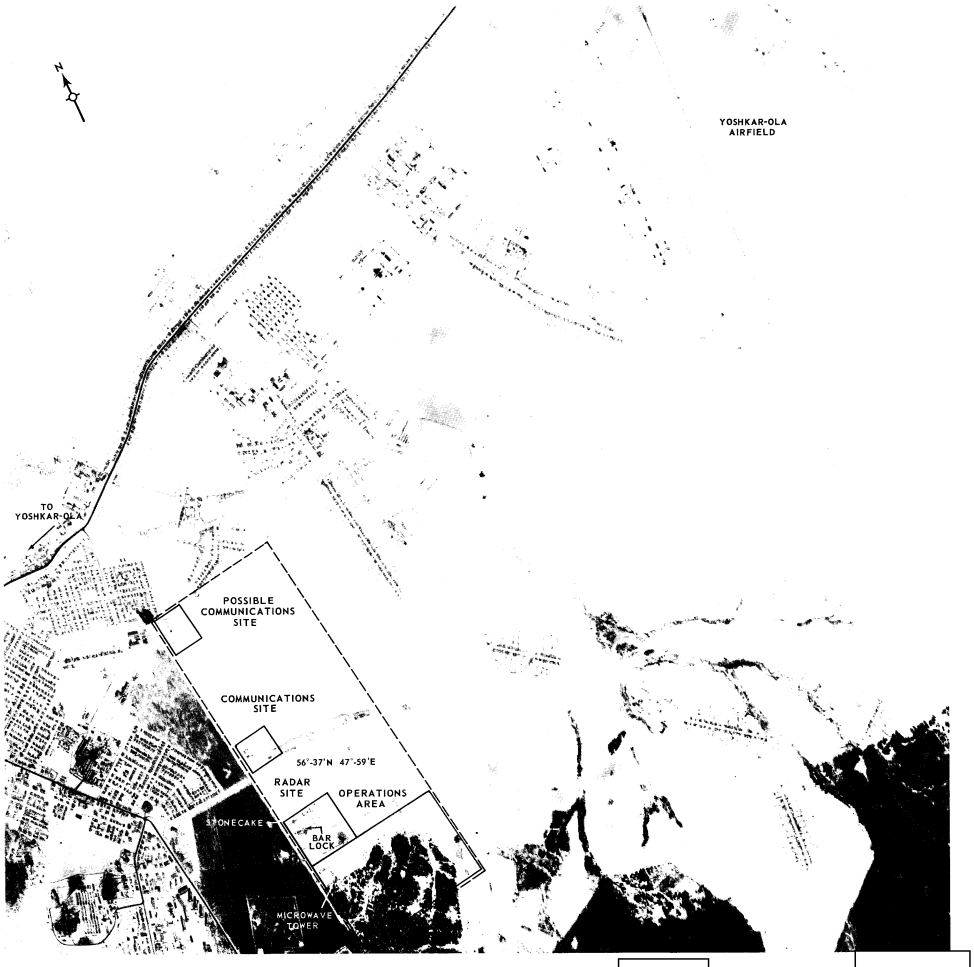

FIGURE 14. YOSHKAR-OLA AIR DEFENSE HEADQUARTERS AREA, [redacted]

electric generator building, personnel housing, a few small support buildings, and several vehicles.

HF Communications Site 2

Location: 7.5 nm NNE of Leninka Airfield

Coordinates: 64-50-20N 177-48-00E [redacted] 25X1

Remarks: The site consists of a large antenna field having 11 fishbone receiving antennas of the 5-3-3-5 pattern, a receiver building which is apparently under construction, and a small support area. (This antenna field should not be confused with another fishbone antenna field which is situated 6.5 nm to the southeast and is associated with an MRBM missile site.)

YOSHKAR-OLA AIR DEFENSE HEADQUARTERS AREA

The installation (Figure 14) is composed of a radar site, an operations area, and one, possibly two, communications sites, all collocated 3 nm southeast of the center of Yoshkar-Ola and 3 nm south-southwest of Yoshkar-Ola Airfield (BE No [redacted] 25X1 The airfield has 31 swept-wing interceptors, a complete GCA system, and a complete ILS system. The operations area is larger than would be expected for just a radar site and, in fact, its size and the number of interceptors at the airfield were the prime reasons for classifying this installation as an air defense headquarters.

Radar Site

Coordinates: 56-37-20N 47-59-20E [redacted] 25X1

Remarks: The radar site contains BAR LOCK, STONE CAKE, and other 25X1

25X1 TOP SECRET [redacted]

antennas not identifiable because of snow glare but of the KNIFE REST-FISH NET type. A quarters building is situated by the BAR LOCK mound. Additional quarters for the radar crew are in woods just southwest of the radar antennas.

Operations Area

This area is situated in woods immediately south of the radar site. It contains a large headquarters building, 9 large barracks-type buildings, 3 large buildings of undetermined function, 12 utility-type buildings, and a fenced microwave tower.

Communications Sites

The identified site is situated approximately 0.8 nm north-northwest of the operations area. The second, possible site is situated a similar distance and direction beyond the first. Because of extreme snow glare, individual antennas are not visible at either of the two sites and identification of the sites is based on similarities to the ground-ground and ground-air-ground communications sites at Olenegorsk.

SIAULIAI
AIR DEFENSE
AIR WARNING SITE

This facility (Figure 15) consists of a radar site and also an operations area which jointly serves Siauliai Airfield (BE [redacted]) 25X1 There are approximately 22 assorted swept- and delta-wing interceptor aircraft at the airfield (heavy and medium bombers were also observed), and Siauliai would have been classified as a headquarters area except that no communications sites could be found.

The operations area, situated northwest of the northwest end of the runway, is very large and includes barracks, headquarters/administration, and aircraft assembly sections.

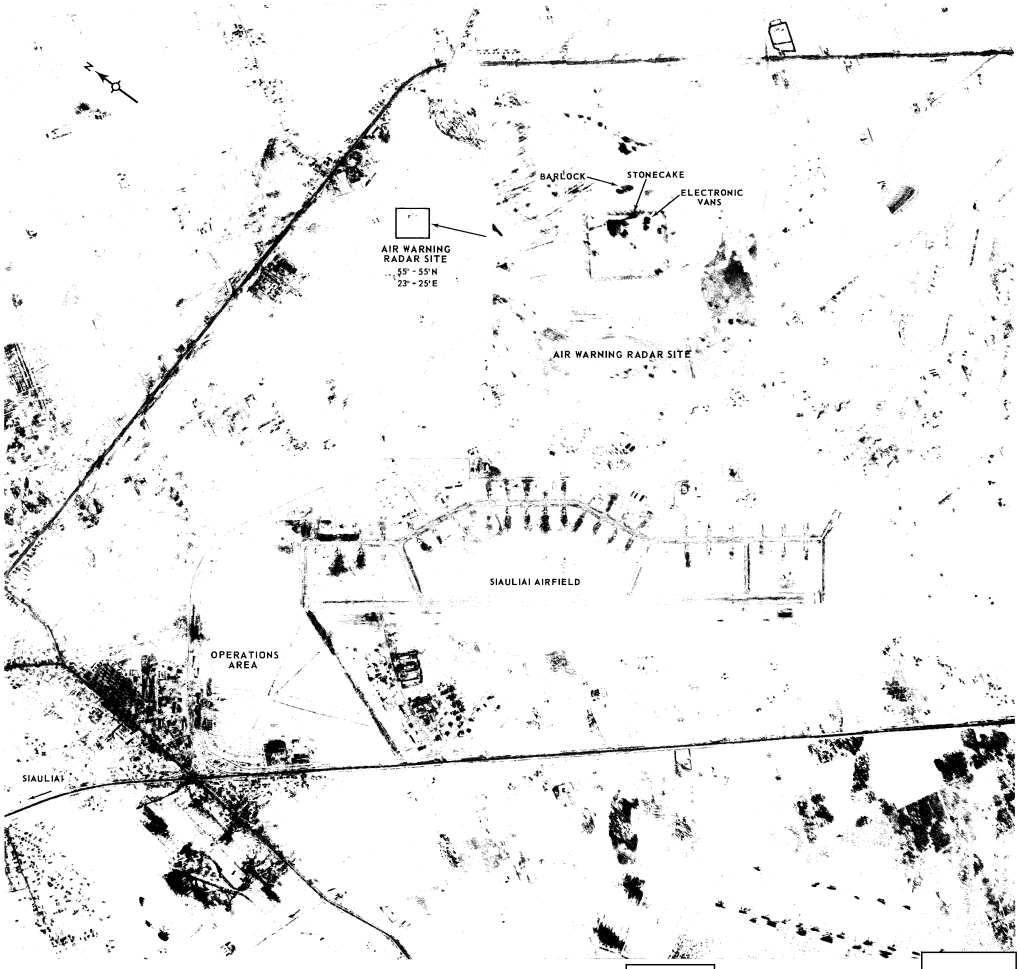

FIGURE 15. SIAULIAI AIR DEFENSE AIR WARNING SITE, [redacted] 25X1 25X1

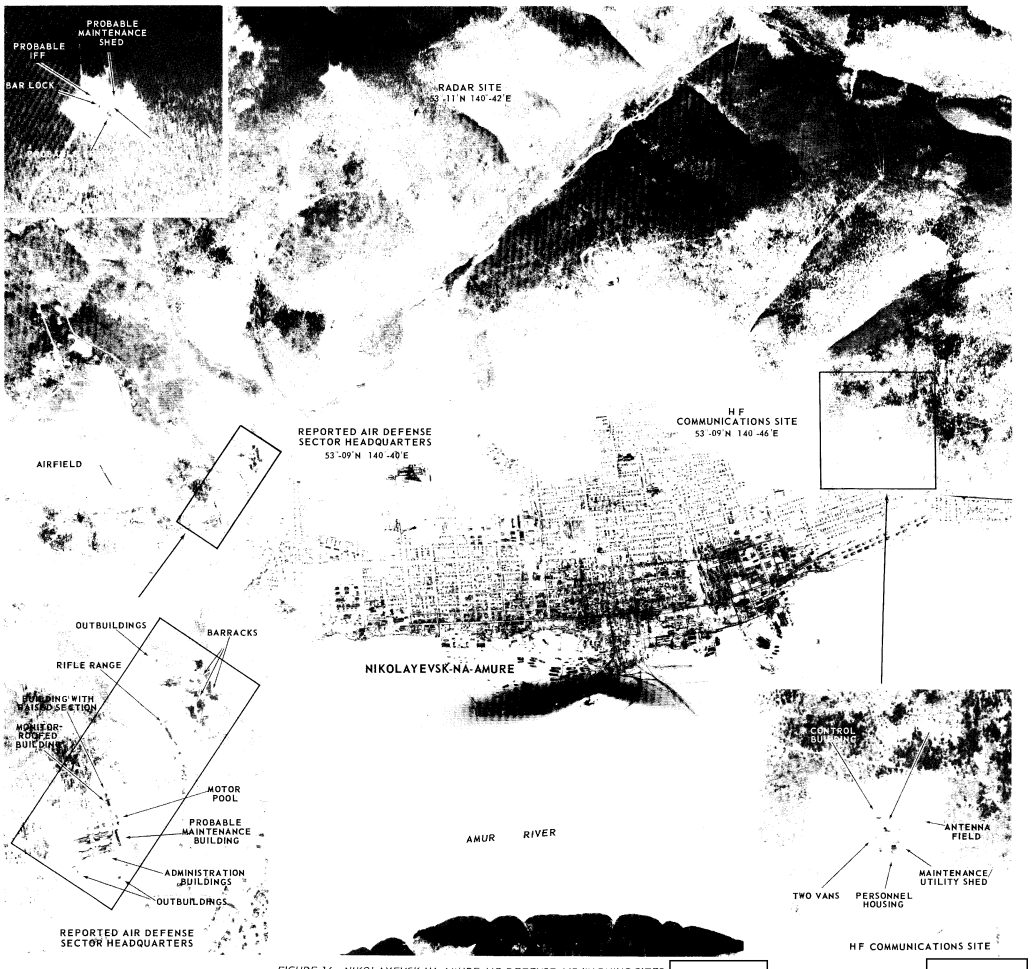

FIGURE 16. NIKOLAYEVSK-NA-AMURE AIR DEFENSE AIR WARNING SITES,

Radar Site

Location: 1.6 nm NNE of the center of the runway

Coordinates: 55-55-20N 23-24-40E

25X1

Remarks: The radar site contains BAR LOCK and STONE CAKE on mounds, a radar crew quarters building, and several electronic vans. All components except the BAR LOCK are within a fenced area.

NIKOLAYEVSK-NA-AMURE

AIR DEFENSE AIR WARNING SITES

Situated at various locations in the environs of Nikolayevsk-na-Amure are a radar site, a HF communications site, and a facility referred to in the requirement as a possible air defense sector headquarters (Figure 16). Nothing was noted on the photography to indicate that this area is a sector headquarters, however, and no fighter or interceptor aircraft were seen at Nikolayevsk Airfield

25X1

25X1

Radar Site

Location: 2.2 nm NNE of Nikolayevsk Airfield

Coordinates: 53-11-00N 140-42-00E

25X1

Remarks: The site contains one BAR LOCK, one probable IFF, one piece of unidentified equipment which is a possible height finder, 4 electronic vans, 2 additional vehicles, a probable radar crew quarters building, a probable maintenance shed, and 4 unidentified objects.

HF Communications Site

Location: 3.6 nm east of the airfield

Coordinates: 59-09-00N 140-45-50E

25X1

25X1

25X1 [redacted]

Remarks: The site consists of a large rectangular antenna field and an operational control area. There are an undetermined number of pole masts in the antenna field, but these have no definite configuration which would indicate antenna type. The control area contains a hip-roofed transmitter/receiver control building, a probable generator building, a gable-roofed probable communications personnel housing building, a maintenance/utility shed, 5 small buildings of unidentified function, 2 electronic vans, and 2 pieces of unidentified equipment.

Reported Sector Headquarters

Location: 0.3 nm SE of the eastern end of the airfield

Coordinates: 53-08-45N 140-40-20E

25X1 [redacted]

Remarks: This facility, composed of administration and housing sections, is reported on the referenced map as AD Sector Headquarters, 25X1 [redacted] The administration section contains 7 large gable-roofed administration buildings; several outbuildings; a monitor-roofed building and a building with a tall, raised section, both of unidentified function; a probable maintenance building; and an adjacent motor pool and open storage area. The housing section consists of 3 large barracks, a few small outbuildings, and a rifle range.

DIKSON
AIR DEFENSE
AIR WARNING SITES

Facilities in the Dikson area (Figure 17) consist of a TALL KING radar site with an alternate site, a radar site with BAR LOCK and other antennas, a possible SMALL CROSS navigational antenna, and

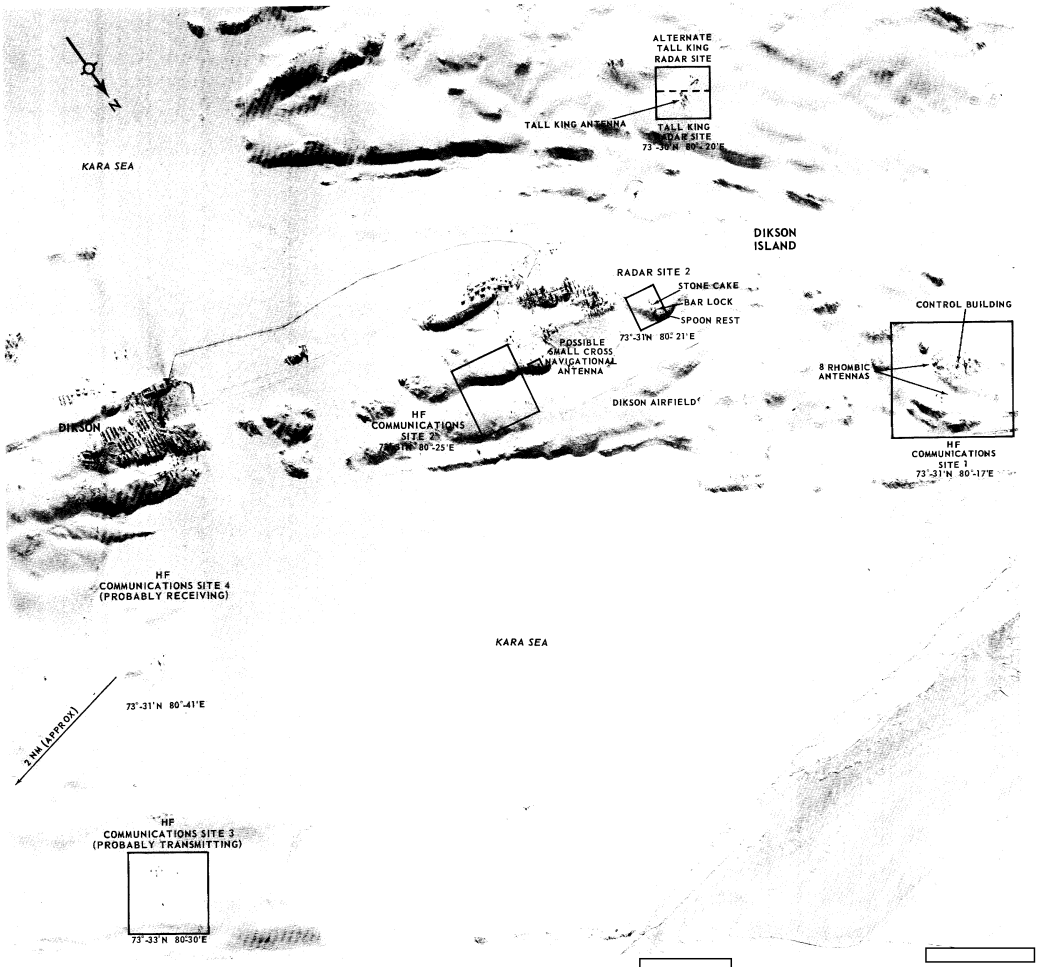

FIGURE 17. DIKSON AREA AIR DEFENSE AIR WARNING SITES, [redacted] 25X1 25X1

4 HF communications sites, 2 of which are probably regional transmitting and receiving sites. No interceptor-type aircraft were observed at Dikson Airfield [redacted] or this installation would have been classified as an air defense headquarters. The photographic reference for the area is: [redacted]

25X1
25X1
25X1

TALL KING Radar Site and Alternate Site

Location: 2 nm SW of center of Dikson Airfield

Coordinates: 73-30N 80-20E

Remarks: The prime site contains a TALL KING antenna together with a control building and a diesel-electric generator with fuel-oil storage. The alternate site consists of nearly identical components except that the TALL KING antenna is not observed.

Radar Site 2

Location: 0.7 nm SW of the runway center

Coordinates: 73-30-50N 80-21-00E

Remarks: Radar antennas at the site consist of BAR LOCK, SPOON REST, and STONE CAKE.

HF Communications Site 1

Location: 1.7 nm WNW of runway center

Coordinates: 73-30-45N 80-17-00E

Remarks: The site consists of 8 double-rhombic antennas, one pair of guyed vertical radiator broadcast antennas, one two-story control building, 3 maintenance buildings, and 6 sheds.

HF Communications Site 2

Location: 0.8 nm ESE of runway center

Coordinates: 73-31-00N 80-25-30E

Remarks: The site contains two rhombic communications antennas.

Possible SMALL CROSS Navigational Antenna

Location: just west of HF communications site 2

Coordinates: same as site above

Remarks: The site contains a possible fixed SMALL CROSS UHF DF navigational antenna atop a building with a spire roof.

HF Communications Site 3

Location: on the mainland, 2.5 nm NNE of Dikson

Coordinates: 73-32-45N 80-30-00E

Remarks: The site consists of six pole masts grouped around a centrally located control building, and a support area just to the west which contains six buildings. This is probably a transmitting site.

HF Communications Site 4

Location: 3.2 nm ENE of Dikson

Coordinates: 73-31-30N 80-41-30E

Remarks: Grouped around a centrally located control building are six pole masts having no particular antenna configuration. In addition, there are three support buildings and several small sheds. This is probably a receiving site.

REFERENCES

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3. USAF. 2/I/CMRUK/R2-64, 27 Jan 64 (SECRET [redacted] 25X1
4. NPIC. R-61/64 [redacted] (SECRET [redacted] 25X1 25X1
5. NPIC. R-201/64, *OAK-Part II,* [redacted] p 33), Mar 64 (TOP SECRET [redacted] 25X1

REQUIREMENTS

[redacted] 25X1

NPIC PROJECT

N-432/64

25X1